

**In the Claims:**

Please cancel claims 1 to 10 and add the following claims 11 to 23:

Claims 1 to 10 (canceled).

11(new). A method of making a stator of an electric machine, said method comprising:

- a) making individual generally strip-shaped laminas (15) for the stator;
- b) stacking the individual laminas (15) to form a stator core (13) with a yoke having a yoke height, so that one side of the stator core is provided with grooves (18) extending through the core;
- c) producing a subassembly by inserting a stator winding (17) into the grooves (18) of the stator core (13) formed in step b);
- d) bending the subassembly in a circular fashion to form a cylindrical cavity, so that the grooves (18) end in the cavity; and
- e) in order to keep the subassembly in a configuration with the cylindrical cavity, connecting at least two ends (23) of the stator core (13) to each other by means of a welding seam (20);

wherein a welding seam depth ( $T_S$ ) of the welding seam (20) is a function of the yoke height ( $H_{yoke}$ ) and a tolerance value ( $\Delta T_S$ ) and is given by the

following formula (I):  $T_S = 0.5 \text{ mm} * (H_{yoke}/\text{mm} - 1) \pm \Delta T_S$  (I).

12(new). The method as defined in claim 11, wherein the tolerance value ( $\Delta T_S$ ) equals 1.0 mm.

13(new). The method as defined in claim 11, wherein the tolerance value ( $\Delta T_S$ ) equals 0.5 mm.

14(new). The method as claimed in claim 11, wherein welding seam depth ( $T_S$ ) of the welding seam (20) is not less than a minimum value ( $T_{Smin}$ ) and said minimum value ( $T_{Smin}$ ) depends on the yoke height ( $H_{Yoke}$ ) and is described by the following formula (II):  $T_{Smin} = \{3/40\} * H_{Yoke}$ .

15(new). The method as claimed in claim 11, wherein the stator core (13) comprises a yoke (26) and the welding seam (20) is arranged on a radial outside (30) of the yoke (26).

16(new). The method as claimed in claim 11, wherein the stator core (13) comprises a plurality of teeth (25), the welding seam (20) is arranged on a radial outside (30) of the yoke (26) and the welding seam (20) is arranged in one of said teeth, said one of said teeth comprising two partial teeth (24).

17(new). The method as claimed in claim 11, wherein the welding seam (20) is disposed on at least one axial end of the stator core (13).

18(new). The method as claimed in claim 11, further comprising making the welding seam by a laser welding process with a laser beam.

19(new). An electric machine comprising a stator (10) made by a method, which comprises:

- a) making individual generally strip-shaped laminas (15) for the stator;
- b) stacking the individual laminas (15) to form a stator core (13) with a yoke having a yoke height, so that one side of the stator core is provided with grooves (18) extending through the core;
- c) producing a subassembly by inserting a stator winding (17) into the grooves (18) of the stator core (13) formed in step b);
- d) bending the subassembly in a circular fashion to produce a cylindrical cavity, so that the grooves (18) end in the cavity; and
- e) in order to keep the subassembly in a configuration with the cylindrical cavity, connecting at least two ends (23) of the stator core (13) to each other by means of a welding seam (20);

wherein a welding seam depth ( $T_S$ ) of the welding seam (20) is a function of the yoke height ( $H_{yoke}$ ) and a tolerance value ( $\Delta T_S$ ) and is given by the

following formula (I): 
$$T_S = 0.5 \text{ mm} * (H_{yoke}/\text{mm} - 1) \pm \Delta T_S \quad (I).$$

20(new). The electric machine as defined in claim 19, consisting of a generator.

21(new). The electric machine as defined in claim 19, wherein the tolerance value ( $\Delta T_S$ ) equals 1.0 mm.

22(new). The electric machine as defined in claim 19, wherein the tolerance value ( $\Delta T_S$ ) equals 0.5 mm.

23(new). The electric machine as claimed in claim 19, wherein the welding seam depth ( $T_S$ ) of the welding seam (20) is not less than a minimum value ( $T_{Smin}$ ) and said minimum value ( $T_{Smin}$ ) depends on the yoke height ( $H_{Yoke}$ ) and is described by the following formula (II):  $T_{Smin} = \{3/40\} * H_{Yoke}$ .